REMARKS

In a non-final Office Action mailed on 19 May 2005, the Examiner rejected all of the original claims, Claims 1 through 33, as anticipated by Wechel et al. (U.S. Patent 6,466,958 or the '958 patent) under 35 U.S.C. §102(e).

The Applicant respectfully traverses the Examiner's rejection as the '958 patent is characterized by the Examiner. Without conceding such other differences as may exist, the Applicant respectfully suggests that there is no suggestion of receiving signals from more than one satellite in Wechel. Specifically, Wechel dos not suggest receiving a signal from a second satellite in the text of the patent cited by the Examiner for support ("Col. 3, Lines 25+"), the cited text reading as follows:

> The flat frequency response of the DFT enables searching of multiple frequency offsets without CPU-intensive processing to compensate for frequency response variations. In one embodiment, the DFT uses an implementation of a Coordinate Rotation Digital Computer (CORDIC) to perform the complex number multiplication. A receiver according to an embodiment of the invention can further include a Doppler correction circuit, which permits correlation data with frequency shift in the code to be non-coherently integrated among relatively fewer addresses or tap positions in memory.
>
> One embodiment uses a complex number multiplier that simultaneously computes multiple products of a complex number multiplicand. In one embodiment, the complex number multiplier multiplies the complex number substantially in compliance with a CORDIC algorithm, where a complex number is multiplied by rotations of angles having arctangents of powers of 2. The complex number multiplier produces products, which are rotated relative to the multiplicand within a first range.

Importantly, the patent refers to an offset resulting from the delay in time between when a signal is expected at a receiver and when it actually arrives and is known as a Doppler offset. The Doppler offset is created by the well-known action of the propagation of radio waves through a medium as a transmitting transducer is in motion through the medium relative to a receiving transducer.

BLACK LOWE & GRAHAM PLLC
701 Fifth Avenue, Suite 4800
Seattle, Washington 98104
206.381.3300 • F: 206.381.3301

Nowhere is an important observation made in the patent without which the term offset is meaningless, that is the observation that when clock signals are stable and accurate, the offset between signals becomes predictable and useful in isolating the coded signal emanating from then a first satellite.

At page 6, line 21 and extending to page 7, line 11 (with reference to FIG. 1) the application states:

> GPS enables any user to measure GPS time anywhere in the world to within substantially less than one microsecond. At the Iridium gateways 40, ground monitors measure Iridium satellite time by measurements of the Iridium downlink 42. The clocks on each Iridium satellite 30-34 are steered to within ±11 microseconds of the ground reference worst case, although the operational values are typically much better. Therefore, the Iridium ground monitor network can measure the clock offset of each Iridium satellite with respect to GPS time to within a few microseconds. If any satellite clock error exceeds the worst-case threshold, it will be flagged as unhealthy. In practice the time monitoring serves only as an integrity check because user equipment position error will dominate all other error sources.
>
> Because the Iridium clock is so close to the GPS clock, if a user is able to obtain the Iridium clock the user will be within a few microseconds of the GPS clock as well. Thus, starting with the Iridium clock greatly reduces the time required to acquire the GPS P/Y code. Once the system acquires the Iridium (or other LEO) clock, it will search for and acquire the GPS clock using a method such as those described below.

A novel aspect of the invention is that it uses the timing signal from a satellite distinct from the GPS satellite providing the transmitted GPS code (either C/A or Y code). In Wechel, the novel teaching is the exploitation of discrete parallel Discrete Fourier Transform testing a received signal at two distinct frequencies thereby speeding the acquisition times for the code. Painstaking review of the '958 patent has not revealed an excerpt of text that unambiguously suggests a second signal having a second distinct clock. Rather all of the references refer to signals generated by a single clock or the discernment of a Doppler shift would be meaningless.

BLACK LOWE & GRAHAM PLLC
701 Fifth Avenue, Suite 4800
Seattle, Washington 98104
206.381.3300 • F: 206.381.3301

For the reason that timing signals distinct from that of the GPS signal are used to help isolate the GPS code is very different from using a single received signal, analyzing that signal at distinct frequencies, in order to overcome Doppler effects.

For these reasons, the claims in their current original state are patentable in light of the '958 patent. Having suitably answered the rejection posited by the Examiner, the Applicant respectfully thanks the Examiner for the thorough examination of these claims and requests that the Examiner find Claims 1 through 33 to be allowable.

CONCLUSION

Having suitably answered the Examiner's rejections, the Applicant respectfully requests allowance of the Claims 1 through 33. Applicant further requests this Response evokes any questions relating to the application or this Response to the Office Action, the Examiner direct those questions to the Applicant's attorney of record, the undersigned.

Once again, the Applicant respectfully thanks the Examiner for the Examination of the instant Application.

Respectfully submitted,

BLACK LOWE & GRAHAM PLLC

Mark L. Lorbiecki
Registration No. 45,643
Direct Dial: 206.903.1800

MAIL CERTIFICATE

I hereby certify that this communication is being deposited with the United States Postal Service via first class mail under 37 C.F.R. § 1.08 on the date indicated below addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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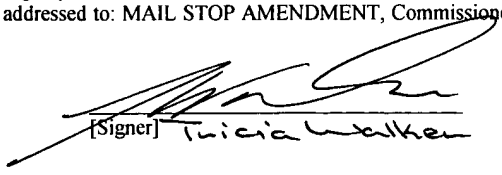

[Signer] Tricia Walker

BLACK LOWE & GRAHAM PLLC
701 Fifth Avenue, Suite 4800
Seattle, Washington 98104
206.381.3300 • F: 206.381.3301